

Claims

1. A method of managing point-to-multipoint services in a mobile communication network, said method comprising:
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receiving (S10) from a mobile station a request for accessing a point-to-multipoint service, said request comprising a subscriber identifier of the subscriber placing the request and a point-to-multipoint service
10 identifier of the point-to-multipoint service for which access is being requested,

storing (S11) a subscriber identification for the subscriber placing the request in association with a
15 point-to-multipoint service identification for the point-to-multipoint service for which access is being requested,

performing (S12) an access enabling procedure, and
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providing (S13) accounting information to an accounting entity (36, 87) of said mobile communication network in which accounting for the point-to-multipoint service is performed with respect to one or more subscribers of the
25 point-to-multipoint service and/or the provider of the point-to-multipoint service, said accounting information identifying the subscriber who placed the request together with the point-to-multipoint service for which access was requested.
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2. The method of claim 1, wherein in addition to identifying a point-to-multipoint service, said accounting information indicates a number of subscribers, said indicated number corresponding to all
35 or a predetermined part of the subscribers currently stored in association with said point-to-multipoint service.

3. The method of claim 2, wherein said accounting depends on the indicated number of subscribers.
- 5 4. The method of claim 3, wherein said accounting comprises billing and a billing tariff decreases with an increasing indicated number of subscribers.
- 10 5. The method of claim 3, wherein said accounting comprises payment and a payment tariff increases with an increasing indicated number of subscribers.
- 15 6. The method of one of claims 1 to 5, wherein said accounting is also performed on the basis of the amount of data transported.
- 20 7. The method of claim 6, wherein said accounting is performed differently for data transported from the mobile communication network to the mobile station than for data transported from the mobile station to the mobile communication network.
- 25 8. The method of claim 7, wherein billing is only performed for data transported in one of the directions of from the mobile communication network to the mobile station and from the mobile station to the mobile communication network.
- 30 9. The method of one of the preceding claims, wherein after performing said access enabling procedure, it is waited (S15, S16) for the receipt of a service access confirmation, and said accounting information is only provided to said accounting entity if said service access confirmation is received.
- 35 10. The method of one of the preceding claims, wherein the subscriber identifications and associated point-to-

multipoint service identifications are stored in a centralized point-to-multipoint service data base (86) for said mobile communication network.

- 5 11. The method of one of the preceding claims, wherein a classification of point-to-multipoint services into categories is provided, said accounting information identifies the category of the point-to-multipoint service, and said accounting of the point-to-multipoint
10 service is performed depending on the identified category.
12. The method of one of the preceding claims, furthermore comprising storing one or more counter values in
15 association with a stored subscriber identification and/or point-to-multipoint service identification.
13. The method of claim 12, furthermore comprising providing
20 said one or more counter values as a part of said accounting information.
14. The method of claim 12 or 13, wherein said one or more counter values comprise one or more of the following:
25 - a time counter value associated with each stored subscriber identification, indicating a time period that has passed since receiving a request from said subscriber,
- a time counter value associated with each stored point-to-multipoint service identification, indicating a
30 time period that has passed since receiving a first request identifying said point-to-multipoint service,
- an event counter value associated with each stored subscriber identification, indicating a number of predetermined events that have occurred since receiving
35 a request from said subscriber, and
- an event counter value associated with each stored point-to-multipoint service identification, indicating a

number of predetermined events that have occurred since receiving a first request identifying said point-to-multipoint service.

- 5 15. The method of one of the preceding claims, wherein said access enabling procedure comprises sending an enable signal to a service provision control entity.
- 10 16. The method of one of the preceding claims, wherein said access enabling procedure comprises sending one or more decryption keys to the mobile station from which the request for accessing a point-to-multipoint service was sent.
- 15 17. The method of claim 16, wherein an individual decryption key is provided in dependence on one or more of:
- each stored subscriber identification,
- each stored point-to-multipoint service identification, and
20 - each pair of a subscriber identification and point-to-multipoint service identification stored in association.
18. The method of claim 16 or 17, wherein said one or more decryption keys are generated dynamically in response to
25 receiving said request for accessing a point-to-multipoint service.
19. A computer program arranged to carry out the method of one of claims 1 to 18 when loaded into and executed in a
30 data processing device communicatively connected to said mobile communication network.
20. A point-to-multipoint service data base entity of a mobile communication network, said point-to-multipoint
35 service data base entity comprising:
- a receiver for receiving from a mobile station a request for accessing a point-to-multipoint service,

said request comprising a subscriber identifier of the subscriber placing the request and a point-to-multipoint service identifier of the point-to-multipoint service for which access is being requested,

5 - a memory for storing a subscriber identification for the subscriber placing the request in association with a point-to-multipoint service identification for the point-to-multipoint service for which access is being requested,

10 - a processor for providing accounting information to an accounting entity of said mobile communication network, said accounting information identifying the subscriber who placed the request together with the point-to-multipoint service for which access was requested.

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21. An accounting entity of a mobile communication network, said accounting entity comprising:

20 - a receiver for receiving accounting information, said accounting information identifying a subscriber who placed a request for a point-to-multipoint service, and identifying a point-to-multipoint service for which access was requested

25 - a processor for performing accounting for the point-to-multipoint service identified in the accounting information, with respect to one or more subscribers of the point-to-multipoint service and/or the provider of the point-to-multipoint service, wherein said processor is arranged such that if said accounting information indicates a number of subscribers corresponding to all
30 or a predetermined part of the subscribers currently stored by the point-to-multipoint service data base entity in association with said point-to-multipoint service, said accounting depends on the indicated number of subscribers.

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